

What is claimed is:

1. A trailer hitch assembly for use with a trailer and a pulling vehicle comprising:
a hitch adapted to be connected to the trailer;
an elongated hitch member having a first end connected to the hitch and a second end;
5 a base frame adapted to be attached to the pulling vehicle;
a movable connection between the hitch member and the base frame permitting the hitch
and the hitch member to move between a first position and a second position
relative to the base frame assembly;
an inflatable apparatus connected to both of the hitch member and the base frame assembly
10 and having a container containing a quantity of gas, the inflatable apparatus being
flexible so as to compress and cause the quantity of gas within the container to
increase in pressure in response to movement of the hitch and the hitch member
between the first and second positions relative to the base frame assembly.
- 15 2. The trailer according to claim 1 wherein the movable connection comprises a
pivotal connection of the hitch member to the base frame for permitting pivotal movement
about a horizontal axis.
3. The trailer according to claim 2 wherein the pivotal connection is located adjacent
20 the second end of the hitch member.
4. The trailer according to claim 3 wherein the inflatable apparatus is connected to the
elongated hitch member between the pivotal connection and the hitch.
- 25 5. The trailer according to claim 2 wherein the pivotal connection is located between
the second end of the hitch member and the hitch.
6. The trailer according to claim 5 wherein the inflatable apparatus is connected to the
elongated hitch member at a point wherein the pivotal connection is located between the
30 inflatable apparatus and the hitch.

7. The trailer according to claim 1 wherein the inflatable apparatus is an air bag.

8. The trailer according to claim 1 wherein the inflatable apparatus includes a first attachment member attached to the hitch member and a second attachment member
5 attached to the base frame, the first and second attachment members being movable in response to movement of the hitch and the hitch member between the first and second positions.

9. The trailer according to claim 8 wherein the first attachment member is movable
10 vertically with respect to the second attachment member in response to movement of the hitch member and the hitch between the first and second positions.

10. The trailer hitch assembly according to claim 8 wherein the first attachment member is movable in a horizontal direction with respect to the second attachment member
15 in response to movement of the hitch member and the hitch between the first and second positions.

11. The trailer hitch assembly according to claim 1 wherein a shock absorber comprises a first shock absorber end directly or indirectly connected to the base frame and a second
20 shock absorber end directly or indirectly connected to the hitch member.

12. A trailer hitch assembly for use with a trailer and a pulling vehicle comprising:
a base frame attached to the pulling vehicle, the base frame having a hitch attachment for
attaching a hitch to the base frame;
25 a pivot member operatively attached to the hitch attachment of the base frame in fixed relation thereto;
an elongated hitch member pivotally attached to the pivot member and having a first hitch member end and a second hitch member end;
a hitch operatively attached to the first hitch member end of the elongated hitch member;
30 the elongated hitch member being pivotal about the pivot member for movement of the hitch from an elevated position to a lowered position;

at least one air bag having a container containing a quantity of gas, the air bag having a first portion connected to the hitch frame, a second portion connected to the base frame and a flexible portion between the first portion and the second portion, the first and second portions being movable toward one another to compress the flexible portion and cause the quantity of gas within the container to increase in pressure in response to movement of the hitch from the elevated position to the lowered position relative to the base frame assembly.

13. The trailer hitch assembly according to claim 12 and further comprising the hitch frame having a central hitch frame member attached to the hitch and spaced apart first and second hitch frame arms connected to the central hitch frame member.

14. The trailer hitch assembly according to claim 13 comprising two of the air bags, the first portion of one of the two air bags being connected to the first hitch frame arm and the first portion of the other of the two air bags being connected to the second hitch frame arm, the second portions of both of the two air bags being connected to the base frame member.

15. The trailer hitch assembly according to claim 12 wherein the hitch attachment of the base frame comprises a receptacle and the pivot member includes a bar that is telescopically received within the receptacle to attach the pivot member to the base frame.

16. A method for cushioning the vertical downward movement of the tongue of a trailer relative to the rear of a vehicle, the method comprising:
attaching a base frame to the rear of the vehicle;
connecting a hitch frame to the base frame for pivotal movement about a first pivotal axis, the hitch frame having a hitch attached thereto;
attaching the hitch to the tongue of the trailer;
pivoting the hitch frame relative to the base frame for pivotal movement about the first pivotal axis so that the hitch moves from an elevated position to a lowered position relative to the base frame;

collapsing a flexible collapsible air container connected between the hitch frame and the base frame in response to movement of the hitch from the elevated to the lowered position, the air container containing a quantity of air therein, whereby the collapsing of the air container causes the pressure of the quantity of air to increase,
5 so as to resist the movement of the hitch from the elevated to the lowered position.

17. The method according to claim 16 and further comprising locating the air container between the first pivotal axis and the hitch.

10 18. The method according to claim 16 and further comprising locating the first pivotal axis between the air container and the hitch.

19. The method according to claim 16 and further comprising collapsing the flexible air container in a horizontal direction in response to movement of the hitch from the elevated
15 to the lowered position.

20 The method according to claim 16 and further comprising collapsing the flexible air container in a vertical direction in response to the movement of the hitch from the elevated to the lowered position.